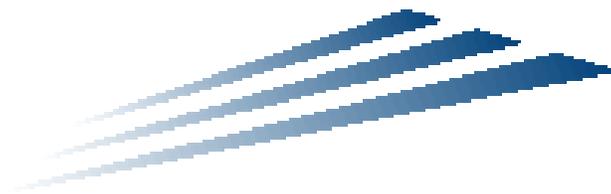


KENTUCKY TRANSPORTATION CENTER

College of Engineering

**EVALUATION OF KENTUCKY'S
“BUCKLE UP KENTUCKY: IT'S THE LAW & IT'S ENFORCED”
CAMPAIGN**





Our Mission

We provide services to the transportation community through research, technology transfer and education. We create and participate in partnerships to promote safe and effective transportation systems.

We Value...

Teamwork -- Listening and Communicating, Along with Courtesy and Respect for Others
Honesty and Ethical Behavior
Delivering the Highest Quality Products and Services
Continuous Improvement in All That We Do

For more information or a complete publication list, contact us

KENTUCKY TRANSPORTATION CENTER

176 Raymond Building
University of Kentucky
Lexington, Kentucky 40506-0281

(859) 257-4513
(859) 257-1815 (FAX)
1-800-432-0719
www.ktc.uky.edu
ktc@engr.uky.edu

**Research Report
KTC-03-26/KSP1-03-11**

**EVALUATION OF KENTUCKY'S
"BUCKLE UP KENTUCKY: IT'S THE LAW & IT'S ENFORCED"
CAMPAIGN**

by

Kenneth R. Agent
Transportation Research Engineer

Eric R. Green
Transportation Research Engineer

Kentucky Transportation Center
College of Engineering

and

Ronald E. Langley, Ph.D.
Director, Survey Research Center

University of Kentucky
Lexington, Kentucky

in cooperation with
Kentucky State Police
Commonwealth of Kentucky

The contents of this report reflect the views of the authors who are responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the University of Kentucky or the Kentucky State Police. This report does not constitute a standard, specification, or regulation. The inclusion of manufacturer names or trade names are for identification purposes and are not considered as endorsements.

August 2003

TABLE OF CONTENTS

	Page
Executive Summary	i
1.0 Background	1
2.0 Procedure	2
2.1 Observations	2
2.2 Motorist Survey	2
2.3 Telephone Survey	3
2.4 Publicity	3
2.5 Enforcement	4
2.6 Fatal/Injury Crashes	4
3.0 Results	4
3.1 Observations	4
3.2 Motorist Survey	5
3.3 Telephone Survey	5
3.4 Publicity	6
3.4.1 Earned Media	6
3.4.2 Paid Media	7
3.5 Enforcement	8
3.6 Fatal/Injury Crashes	8
4.0 Conclusions	9
Appendix A. Safety Belt Observations	13
Appendix B. Motorist Survey	15
Appendix C. Telephone Survey Results	18

EXECUTIVE SUMMARY

The objective of this report was to document the results of the “Buckle Up Kentucky: It’s the Law & It’s Enforced” campaign in Kentucky. The campaign involved a combination of earned media, paid media, and enforcement. The earned media started about three weeks prior to Memorial Day 2003 and continued through the enforcement period. The paid media started about two weeks prior to Memorial Day. The enforcement period was a two-week period including the week before and the week of Memorial Day.

The evaluation of the campaign included documenting the activities associated with the program (publicity and enforcement) and evaluating the results. The evaluation involved conducting observations of seat belt usage at a sample of locations across the state, motorist surveys obtained at driver licensing locations, telephone surveys of drivers, and comparing the number of fatal and injury crashes during the enforcement period with previous years.

Seat belt usage at a mini-sample set of 21 locations across the state (compared to 200 sites for a full statewide survey) found that usage increased from a baseline level of 61.6 percent to a high of 72.5 percent during the enforcement phase of the campaign. No substantial difference in usage rates could be associated with only the media portion of the campaign with usage rates of 61.8 and 62.3 percent during the earned and paid media, respectively.

Results of the surveys of drivers found that the publicity was effective in making drivers aware of the increase in enforcement and checkpoints associated with the campaign. The post-campaign telephone survey showed a significant increase in drivers who stated they had recently increased their use of seat belts which could be related to the increase in the perceived likelihood of receiving a ticket if a seat belt was not worn. The telephone survey showed that, after the campaign, about 78 percent of the drivers had heard of the “Buckle Up Kentucky: It’s the Law & It’s Enforced” campaign.

The extent of the publicity was documented. The effectiveness of the television and radio spots was confirmed with the driver surveys which showed that their knowledge about the campaign was most often from television or radio.

Enforcement was conducted by both state and local police through saturated enforcement and checkpoints. A total of 8,325 seat belt citations and 599 child restraint citations were given during the two-week enforcement period.

The numbers of injury crashes and injuries during the two-week enforcement period of the campaign were lower than in any of the previous five years. The number of injuries during this period was 289 less than the average of the previous five years which results in an economic savings of about \$11.5 million..

A review of the data results in the opinion that the current law in Kentucky must be changed from secondary to primary enforcement to obtain a long-term high seat belt use percentage. There must also be an awareness by the public that the law is being enforced.

1.0 BACKGROUND

The use of safety belts has been shown to be an effective method to reduce the severity of injuries to occupants of motor vehicles involved in traffic crashes. Methods used to increase usage rates have included public information campaigns, legislation, and enforcement of the legislation. Kentucky enacted statewide legislation, requiring the use of safety belts for all vehicle occupants, in 1994. Kentucky's law allows secondary enforcement which means a citation can be written only after an officer stops a vehicle for another violation.

Statewide observational surveys were first conducted in Kentucky in 1982 with a driver usage rate of only 4 percent. The usage rate has increased dramatically over the past years to a level of 62 percent for drivers in 2002. However, this level is only four percentage points above the 58 percent rate found in 1994 immediately after enactment of the statewide legislation. The level is also below the national average.

Selective traffic enforcement programs (STEPS) have been used to modify motorist behavior (especially related to speeding). The use of STEPs to increase safety belt usage rates was first done in Elmira, NY in 1985. Canada was the first country to use this technique. National efforts in the United States, using STEPs, have included Operation Buckle Down in 1991 and 1992, Safe and Sober in 1996 and 1997, and Operation ABC in 1998 through 2000. The first statewide STEP, named Click It or Ticket, was in North Carolina in 1993.

The Click It or Ticket campaign was used in Kentucky in 2001 as part of an effort for states across the southeastern United States. The coordinated effort was made in response to the high fatality rate in the southeast compared to the remainder of the nation. Increasing safety belt usage was seen as an effective means to decrease this high fatality rate. The use of a STEP enforcement effort (named Click It or Ticket) was selected as a method to increase the usage rate. A coordinated effort was made with the eight states in Region IV of the National Highway Traffic Safety Association (NHTSA) with the enforcement occurring in a two-week period around Memorial Day in 2001.

The objective of this report was to document the results of a similar campaign conducted around Memorial Day in 2003. The name of the 2003 campaign was "Buckle Up Kentucky: It's the Law & It's Enforced". A goal was to increase the belt use 10 percentage point in the enforcement period from the baseline level.

The campaign involved a combination of earned media, paid media, and enforcement. The earned media started about three weeks prior to Memorial Day and continued through the enforcement period. The paid media started about two weeks prior to Memorial Day. The enforcement period was a two-week period including the week before and the week of Memorial Day.

2.0 PROCEDURE

The evaluation of the campaign included documenting the activities associated with the program (publicity and enforcement) and evaluating the results. The evaluation involved conducting observations of seat belt usage at a sample of locations across the state, motorist surveys obtained at driver licensing locations, telephone surveys of drivers, and comparing the number of fatal and injury crashes during the enforcement period with previous years. Following is a description of the procedures used in the evaluation.

2.1 Observations

Statewide surveys have been conducted in Kentucky since 1982. The last modification in the procedure was made in 1999. The statewide survey involves collecting two hours of data at 200 sites across the state. Seat belt data are collected for the driver and front-seat passenger in the outboard position. Four categories of vehicles are used (passenger car, pickup, van, and sport utility vehicle). The sampling design plan divides the state into three geographical regions and seven roadway functional classification groups resulting in 21 stratum. The statewide rate is determined using the usage rate and total vehicle miles for each stratum.

Data had to be collected to provide a baseline statewide usage rate to compare with data collected during the earned media, paid media, and enforcement portions of the campaign. Four sets of data could not be reasonably collected at all 200 sites during the available time frame. Therefore, a site was selected from each of the 21 stratum to represent the usage rate for the stratum. A list of these sites is given in Appendix A. Using data from these 21 sites has been shown to result in very similar statewide usage rates as obtained from the 200 sites. This shows that the sample of sites can effectively represent the statewide sample sites.

Four sets of the mini-surveys were collected in 2003 before, during, and after the campaign. The baseline data were collected in April before the start of the earned media. The data for the earned media were collected between May 7 and 11. The paid media data were collected between May 12 and 18. The data during the enforcement period were collected between May 23 and May 27.

2.2 Motorist Survey

The data from this survey were used to assess: a) public knowledge of the “Buckle Up Kentucky: It’s the Law & It’s Enforced” campaign, b) changes motorists may have made in their seat belt use behaviors, c) how vigorously they felt state and local police agencies enforce the law, and d) the likelihood police would stop them for a seat belt violation. They were also asked whether they had heard about or gone through a checkpoint and if they had heard about seat belt enforcement programs.

Other states have obtained surveys at their Division of Motor Vehicle (DMV) licensing offices. However, Kentucky does not have a DMV with the responsibilities divided among various agencies. The surveys in Kentucky were obtained from a sample of counties when drivers went to the county clerk office to renew their license. The form given in Appendix B was given to the drivers as they were waiting in the licensing office.

Data were obtained in several counties in order to represent the geographical regions across the state and various populations. Two sets of surveys were collected (baseline and post campaign). These data were collected by representatives of the Kentucky State Police and analyzed by Preusser Research Group, Inc.

2.3 Telephone Survey

Two sets of telephone surveys were conducted by the University of Kentucky Survey Research Center. The first set was conducted from April 23 to May 4, 2003 before the start of the campaign. The second set for the post-campaign survey was from May 27 to June 4, 2003.

The questions on the survey obtained information about the driver's: type and amount of driving, use of seat belts and any change in usage, knowledge about Kentucky's seat belt law and its enforcement, opinion about the effectiveness of seat belts, knowledge of increased enforcement or checkpoints, awareness of any related advertisements or activities, and general characteristics.

Respondents were contacted using a modified, list-assisted Waksberg Random-Digit Dialing method giving every household with a telephone line in Kentucky an equal probability of being contacted. Up to 15 attempts were made to each number in the sample. In addition, up to 10 scheduled call-backs were made to those reached at an inconvenient time, and one refusal conversion was attempted. A sample size of 500 was desired for each survey. The Survey Research Center also provided a statistical analysis of the results.

2.4 Publicity

The media publicity could be classified in two broad categories. One was earned media which was provided at no charge. The second was the paid media which was purchased. The paid media involved radio, network television, and cable television as well as the placement of outdoor posters. The type and amount of publicity during each phase of the campaign were summarized.

The marketing objective of the publicity was to create public awareness of the seat belt initiative. The primary target audience were males in the age range of 18 through 24 years with the secondary audience for the age range of 25 through 54 years of age. Television programming, cable networks, and radio stations/formats were selected that appeal to young males. Since approximately 66 percent of the primary audience live in the television markets of

Bowling Green, Lexington, Louisville, and Paducah, these areas were selected as the primary focus. Radio and local cable were also used. Emphasis was also placed on eastern Kentucky since lower rates have been found in this region.

2.5 Enforcement

Enforcement was achieved through both the Kentucky State Police (KSP) and local agencies. Enforcement involved both checkpoints and saturated patrols. In addition to seat belt citations, other citations and arrests were made. The numbers of various types of citations given over the enforcement period were summarized.

2.6 Fatal/Injury Crashes

The statewide crash data file was searched to determine the numbers of fatal and injury crashes which occurred during the enforcement dates of the “Buckle Up Kentucky: It’s the Law & It’s Enforced” campaign. This data were then compared to previous years. The numbers of fatalities and injuries were also obtained during each of these time periods.

3.0 RESULTS

3.1 Observations

Four sets of mini-surveys were conducted at the 21 sample locations as part of the campaign and compared to data from the 2002 statewide survey. The data for the individual sites are given in Appendix A.

Data were collected during the various phases of the campaign with the following usage rates obtained.

Baseline	April 2003	61.6 percent
Earned Media	May 7 - May 11, 2003	61.8 percent
Paid Media	May 12 - May 18, 2003	62.3 percent
Enforcement	May 23 - May 27, 2003	72.5 percent

The baseline data closely agree with the 2002 statewide survey which had found a statewide usage rate of 62.0 percent. The results from the baseline data showed that the sites selected for the mini-surveys were representative of all the statewide sites.

The data show no substantial difference in usage rates could be associated with the media portion of the campaign; however, there was a dramatic increase during the enforcement phase of the campaign. The goal of increasing seat belt usage 10 percentage points from the baseline was achieved.

3.2 Motorist Survey

A copy of the one-page survey form is given in Appendix B. The surveys were completed in the county clerk's office in various counties. The counties were selected to represent different geographical regions of Kentucky with varying populations. The analysis of the results of the survey was performed by Preusser Research Group, Inc.

Two sets of data were collected representing the baseline and the first days following the campaign. There was a sample size of 851 for the baseline and 693 for the post campaign.

A summary of the characteristics of the drivers completing the survey is given in Appendix B. Slightly over one-half of those responding were female with about 93 percent white. About one-half were between 26 and 49 years of age. About 40 percent drove under 10,000 miles per year with about one-third driving over 15,000 miles per year. Slightly over 50 percent drove a passenger car followed by approximately 20 percent driving a pickup.

A summary of the results of the surveys taken during various phases of the campaign is given in Table 1. There were no statistical differences in the reporting of always wearing a safety belt, having a high likelihood of receiving a ticket for non-use, the strictness of enforcement, or receiving a ticket. However, there were major differences, which were statistically significant, in the reporting of: a) learning about or going through seat belt checkpoints within the past month and b) reading/seeing/hearing a seat belt message. For example, the percentage aware of checkpoints increased from 33.9 percent in the baseline to 58.0 percent post campaign with the percentage going through a checkpoint increasing from 11.9 to 29.1 percent.

The percentage of drivers who recently had read/seen/heard a seat belt message increased from 66.8 to 86.0 percent. The most common sources of hearing about seat belts were television (67.0 percent) and radio (46.9 percent). The percentage of drivers who had heard of the "Buckle Up Kentucky: It's the Law and It's Enforced" program increased from 57.2 to 64.2 percent. The high percentage prior to the campaign would be related to various versions of previous campaigns which have used "Buckle Up Kentucky" as part of the campaign.

3.3 Telephone Survey

The University of Kentucky Survey Research Center conducted these surveys. The disposition results of the survey were as follows:

Pre-campaign survey:

Interviews completed	501
Refused	708
Not Eligible	155
Total	1,364
Response rate	41.4 percent

Post-campaign survey	
Interviews completed	525
Refused	895
Not Eligible	347
Total	1,767
Response rate	37.0 percent

The margin of error for samples of this size is approximately plus or minus 4.3 percent at the 95 percent confidence level. The results of the surveys are given in Appendix C. The Survey Research Center provided a detailed summary of the responses to each question. They also provided results of a t-test for Independent Samples analysis which was used to determine if changes in the responses for the pre- and post-surveys were statistically significant.

A summary of some of the results of the telephone surveys is given in Table 2. There was a statistically significant increase in drivers who stated they had recently increased their use of seat belts after the campaign. The cause of this increase could be related the increase in the perceived likelihood of receiving a ticket if a seat belt was not worn. There were several questions with statistically significant increases which showed drivers were aware of the increase in enforcement and checkpoints associated with the campaign. This knowledge was obtained most often on television or radio with a commercial advertisement the most common form of obtaining the information. The data showed the extent the publicity had reached drivers with the post-survey showing that about 78 percent had heard of the “Buckle Up Kentucky: It’s the Law and it’s Enforced” campaign. It should be noted that a high percentage indicated they were aware of the campaign slogan in the pre-campaign survey. This would be related to various prior campaigns which have used variations of the Buckle up Kentucky slogan.

3.4 Publicity

The publicity consisted of a combination of earned and paid media. Following is a summary of the amount and type of advertising used in the earned and paid media.

3.4.1 Earned Media

The earned media campaign was a combined effort between the Kentucky State Police (KSP) Public Affairs officers and Paul Schultz Advertising. The earned media dates were between May 5 and June 8, 2003. There were broadcast news stories on television in Lexington and Louisville and radio in Louisville. There were seven newscasts in both Louisville and Lexington with one radio newscast in Louisville. The estimated value of the broadcast news stories was about \$5,899. There were also in-studio and phone-in interviews/promos on television and radio. The pre-recorded promos were 30 seconds in length and recorded by a trooper or KSP representative. There were nine television interviews/recorded promos in five major markets (three in Louisville, three in Lexington, and one in Bowling Green, Paducah, and Hazard). There were 30 radio interviews/recorded promos in three metro area radio markets (15

in Louisville, nine in Lexington, and six in Cincinnati). The estimated value of the interviews/recorded promos was about \$23,250. The total estimated equivalent value of the broadcast earned media was \$29,149.

3.4.2 Paid Media

The paid media was administered by a private company (Paul Schultz Advertising). It consisted of radio, broadcast and cable television spots, and outdoor posters. The paid media dates were between May 12 and May 25, 2003. There were both paid and bonus media included. The cost of all of the paid media was \$345,852 with the estimated value of the bonus media of \$253,350 resulting in a total estimated value of \$599,202. Following is a description of the various types of paid media.

Television: The television spots were aired on 14 broadcast television stations in five cities (Bowling Green, Hazard, Lexington, Louisville and Paducah). The network affiliates included NBC, CBS, ABC, FOX, and WB. Approximately 60 percent of the spots and 78 percent of the costs were in Louisville and Lexington television markets. The television spot was 30 seconds in length. It was recorded by the GMMB agency in Washington, DC. There were 355 paid and 115 bonus spots for a total of 470. The cost for the paid television spots was \$138,520 with the value of the bonus spots estimated as \$11,500.

Cable: The cable television spots were aired in eight markets (Ashland, Lexington Metro, Louisville, Northern Kentucky, Owensboro, Pikeville, Prestonsburg, and Somerset). The cable networks included were ESPN, ESPN2, MTV, Comedy Central, and TNT. The same television spot that aired on broadcast television also aired on cable. There were 2,703 paid and 2,577 bonus spots for a total of 5,280. The cost for the paid cable spots was \$38,000 with the value of the bonus spots estimated as \$128,850.

Radio: The radio spot was 60 seconds in length and was recorded specifically for the subject campaign by the GMMB agency. The radio spot was played in over 100 radio stations which were spread across the state with various types of format. Traffic sponsorships that were read by the station personalities were also used to increase frequency of the message. There were 4,401 paid and 1,800 bonus spots for a total of 6,201. The cost for the paid radio spots was \$132,284 with the value of the bonus spots estimated as \$90,000.

Outdoor Posters: The size of the outdoor posters was 12 feet by 24 feet. They were placed in or around all towns containing a KSP post (Mayfield, Nortonville, Morgantown, Elizabethtown, Campbellsburg, Dry Ridge, Richmond, Morehead, Pikeville, Harlan, London, Frankfort, Hazard, Ashland, Columbia, and Henderson) plus Bowling Green, Frankfort, Lexington, and Louisville. The posters carried the headline "Buckle Up Kentucky. It's the Law. It's Enforced" and were designed by Paul Schultz Advertising. There were 80 paid with 46 bonus posters for a total of 126. The cost for the paid posters was \$37,048 with the value of the bonus posters estimated as \$23,000.

3.5 Enforcement

The enforcement period was a two-week period from May 19 through June 1, 2003. There are approximately 378 police agencies in Kentucky and contact was made with each agency with an agreement of participation obtained from 271 agencies. The extent of participation varied by local agency. A summary of the results of the enforcement is given in Table 3. The enforcement involved both saturated enforcement and checkpoints and involved both KSP and local police.

There were a total of 8,325 seat belt citations given along with 599 child restraint citations during the two-week enforcement period. Approximately 83 percent of the seat belt citations were given as a result of the saturated enforcement. About 38 percent of the seat belt citations were from KSP. The large majority of the seat belt citations from both KSP and local police were the result of saturated enforcement.

There were 920 checkpoints with 61 percent by KSP. There was about five times as many officers involved in saturated enforcement than checkpoints and almost 13 times as many hours spent on saturated enforcement as compared to checkpoints.

There were other citations and arrests which occurred as a result of this enforcement. The largest number was speeding citations resulting from the saturated enforcement. There were 1,720 DUI arrests and 1,237 drug related arrests.

3.6 Fatal/Injury Crashes

The numbers of fatal crashes, fatalities, injury crashes, and injuries occurring in Kentucky during the enforcement period of the “Buckle up Kentucky: It’s the Law & It’s Enforced” campaign (May 19 through June 1, 2003) were compared to those occurring during the same time period for the previous five years. The numbers of injuries and injury crashes in 2003 were lower than in any of the previous five years. The average number of fatalities and fatal crashes were almost identical to the previous five years.

There were 33 fatalities during this two-week period in 2003. This compares to an average of 33.4 fatalities over the years of 1998 through 2002 with a range of 29 in 1999 to 40 in 2000.

The number of injury crashes decreased during the enforcement time period. There was an average of 1,390 injury crashes between May 19 and June 1 for 1998 through 2002 (with a range of 1,309 in 2002 to 1,470 in 2000) compared to 1,240 in 2003. There was an average of 2,141 injuries between May 19 and June 1 for 1998 through 2002 compared to 1,852 in 2003. A reduction of 289 injuries would result an economic cost savings of about \$11.5 million using National Safety Council cost data.

4.0 CONCLUSIONS

The observational surveys showed that seat belt usage can be increased using a combination of publicity and enforcement. However, publicity alone was shown to have a minimal effect on usage. A substantial increase in seat belt usage occurred when increased enforcement was combined with the publicity. The data show that an increased awareness of the possibility of receiving a ticket for failing to wear a seat belt is required for a certain segment of the driving population to increase their use of seat belts. The increase in usage has not been sustained when the perception of an increased possibility of receiving a ticket is removed.

A review of the data results in the opinion that the current law in Kentucky must be changed from secondary to primary enforcement to obtain a long-term high seat belt use percentage. This must be combined with the necessary publicity to provide an awareness to the public that the law is being enforced.

TABLE 1. MOTORIST SURVEY RESULTS

	Percent		Chi-Square Statistic
	Baseline	Post	
(Sample Size)	(851)	(693)	
Reported "Always" uses a seat belt	63.8	60.6	NS
Reported "Always" a high-likelihood of a seat belt ticket for non-use	20.1	18.9	NS
Reported strictness of State Police as "Very"	30.1	28.6	NS
Reported strictness of Local Police as "Very"	26.1	26.0	NS
Reported ever receiving a seat belt ticket	8.2	9.7	NS
Reported having read/seen/heard about seat belt checkpoints in the past month	33.9	58.0	p<.001
Reported going through a seat belt checkpoint in the past month.	11.9	29.1	p<.001
Reported having read/seen/heard seat belt message	66.8	86.0	p<.001
Read about seat belts in the paper	30.5	28.5	NS
Heard about seat belts on the radio	31.0	46.9	p<.001
Saw seat belt message on TV	50.2	67.0	p<.001
Saw seat belt message poster	21.7	16.4	NS
Read about seat belts in a brochure	5.9	6.3	NS
Heard about seat belts at a checkpoint	5.5	12.5	p<.001
Heard about seat belts by other means	16.6	16.2	NS
Heard of Click it or Ticket program	32.0	49.1	p<.001
Heard of No Excuses Buckle Up program	13.0	12.7	NS
Heard of "Buckle Up Kentucky: It's the Law and it's Enforced" program	57.2	64.2	p<.005
Heard of Operation Stay Alive	1.5	1.9	NS

NS = not significant (p>.01)

TABLE 2. SUMMARY OF TELEPHONE SURVEY RESULTS

Question	Choices	Percent		t-test Statistic*
		Before	After	
Frequency wearing shoulder belt	All of the time	74.2	75.3	
Change of seat belt usage in the last 30 days	Increased	7.7	12.2	p < 0.05
Likelihood for receiving ticket while not wearing seat belt for six months	Very likely	19.6	29.2	p < 0.05
Understanding of existing seat belt offense level	Primary offense	45.3	60.0	p < 0.05
Should police be able to ticket for not wearing seat belt when no other traffic laws are being broken (primary law)?	Yes	59.0	61.6	
Have you received a ticket for not wearing a seat belt?	Yes	4.0	6.7	
Police generally do not write tickets for seat belt violations	Strongly agree	23.5	21.2	
Police enforcement of belt laws are important	Strongly agree	62.7	67.2	
Police are ticketing more often than a few months ago	Strongly agree	20.9	34.6	p < 0.05
Aware of special efforts regarding seatbelt ticketing in the last 30 days	Yes	9.1	53.8	p < 0.05
If yes, where did you see or hear of this?*	TV	33.3	55.7	
	Radio	26.7	33.9	
	Friend-Relative	20.0	8.6	
	Newspaper	15.6	13.6	
	Witnessed checkpoint	8.9	6.8	
	Road signs	4.4	5.0	
Have you heard about seat belt checkpoints in the last 30 days?	Yes	18.6	52.4	p < 0.05
If yes, where did you see or hear of this?*	TV	17.2	39.6	
	Radio	16.1	22.5	
	Friend-Relative	21.5	18.5	
	Newspaper	12.9	16.7	
	Witnessed checkpoint	30.1	15.6	
In the last 30 days have you seen a checkpoint?	Yes	9.2	14.5	p < 0.05
In the last 30 days have you been aware of increased child safety seat enforcement?	Yes	17.0	38.5	p < 0.05
In the last 30 days have you been aware of increased publicity related to seat belt usage?	Yes	79.2	90.0	p < 0.05
Number of messages in the last 30 days	More than usual	11.3	60.2	p < 0.05
Importance of seat belt enforcement for adults	Very important	54.3	62.9	
Seen or heard messages encouraging adults to ensure children use safety seat	Yes	45.6	60.8	p < 0.05
Have you heard or seen these slogans in the past 30 days?	Click it or ticket	40.5	67.0	p < 0.05
	Buckle up Kentucky. It's the Law and it's Enforced	65.1	78.1	p < 0.05

*A t-test was conducted comparing the means of the before and after samples. Questions that had a p-value of less than or equal to 0.05 were considered as showing a "statistically significant" change. The test applied to all responses, even those not listed.

**Further analysis was not needed therefore, a t-test was not performed on these multiple response questions.

TABLE 3. "BUCKLE UP KENTUCKY: ITS' THE LAW AND IT'S ENFORCED" CAMPAIGN ENFORCEMENT ACTIVITY BY KSP AND LOCAL AGENCIES

<i>Saturated Enforcement Activity</i>												
	Number of Officers	Hours Worked	Seat Belt Citations	Child Restraint Citations	Speeding Citations	DUI Arrests	Other Citations	Drug Related Arrests	Fugitive Apprehensions	Stolen Vehicles Received	Other Arrests	
KSP	1,050	45,424	2,334	175	7,891	472	6,271	326	121	6	1,084	
Local Police	4,990	138,857	4,537	236	15,406	949	14,810	784	699	53	2,047	
Total	6,040	184,281	6,881	411	23,297	1,421	21,081	1,110	820	59	3,131	
<i>Checkpoint Activity</i>												
	Number of Checkpoints	Number of Officers	Hours Worked	Seat Belt Citations	Child Restraint Citations	Speeding Citations	DUI Arrests	Other Citations	Drug Related Arrests	Fugitive Apprehensions	Stolen Vehicles Received	Other Arrests
KSP	558	604	10,833	844	119	N/A	159	2,239	61	19	2	122
Local Police	362	579	3,834	600	69	N/A	140	1,401	66	41	1	104
Total	920	1,183	14,667	1,444	188	N/A	299	3,640	127	60	3	226
Grand Total	920	7,223	198,948	8,325	599	23,297	1,720	24,721	1,237	880	62	3,357

APPENDIX A. SAFETY BELT OBSERVATIONS

Table A-1. Summary of Seat Belt Observations at Individual Sites.

LOCATION		PERCENT USAGE (ALL FRONT SEAT)			
COUNTY	INTERSECTION	BASELINE	EARNED MEDIA	PAID MEDIA	ENFORCEMENT
Barren	I-65 at Exit 53	78.7	77.6	74.9	82.0
Meade	US 31W at KY 1638	65.1	66.7	66.7	73.7
Grayson	KY 259 at US 62	49.7	53.4	52.7	63.6
Logan	US 68 at US 79	48.1	49.6	56.4	63.1
Hopkins	Pennyrile Parkway at Exit 44	68.5	62.8	66.8	73.2
Henderson	Us 41A at 5th St.	55.2	57.6	59.6	63.7
Calloway	KY 1637 at 16th	52.1	50.1	50.8	58.9
Shelby	I-64 at Exit 28	68.1	66.0	65.0	80.9
Woodford	US 60 at US 62	73.8	70.0	75.1	78.5
Oldham	KY 146 at KY 1817	61.8	64.2	63.0	74.8
Franklin	KY 2820 at US 127	54.2	56.6	51.3	71.2
Kenton	I-75 at Exit 186	75.9	73.2	72.4	82.2
Jefferson	US 31W at KY 841	54.0	57.4	62.1	66.4
Boone	US 42 at US 25	63.2	63.0	66.9	73.9
Boyd	I-64 at Exit 185	73.3	73.6	70.9	83.8
Lincoln	US 27 at US 150	55.7	57.1	53.6	70.2
Carter	US 60 at KY 7	44.2	47.8	45.3	59.1
Floyd	KY 680 at KY 122	43.6	41.9	47.2	63.8
Rowan	I-64 at Exit 137	73.6	74.9	75.0	85.7
Laurel	US 25E at US 25	54.0	56.0	56.9	70.7
Pulaski	KY 80 at KY 2296	60.3	57.5	59.6	76.1
		61.6	61.8	62.3	72.5

APPENDIX B. MOTORIST SURVEY

The Governor's Highway Safety Program is assisting in a study about safety belts in Kentucky. Your answers to the following questions are voluntary and anonymous. Please complete the survey and then put it in the drop box.

1. **Your sex:** Male Female
2. **Your age:** Under 21 21-25 26-39 40-49 50-59 60 Plus
3. **Your race:** White African American Asian Native American Other
4. **Are you of Spanish/Hispanic origin?** Yes No
5. **Your Zip Code:** _____
6. **About how many miles did you drive last year?**
 Less than 5,000 5,000 to 10,000 10,001 to 15,000 More than 15,000
7. **What type of vehicle do you drive most often?**
 Passenger car Pickup truck Sport utility vehicle Mini-van Full-van Other
8. **How often do you use safety belts when you drive or ride in a car, van, sport utility vehicle or pickup?**
 Always Nearly always Sometimes Seldom Never
9. **What do you think the chances are of getting a ticket if you don't wear your safety belt?**
 Always Nearly Always Sometimes Seldom Never
10. **Do you think the Kentucky State Police enforce the safety belt law:**
 Very strictly Somewhat strictly Not very strictly Rarely Not at all
11. **Do you think local police enforce the safety belt law:**
 Very strictly Somewhat strictly Not very strictly Rarely Not at all
12. **Have you ever received a ticket for not wearing your safety belt?**
 Yes No
13. **In the past month, have you seen or heard about a traffic safety checkpoint where police were looking at child restraints and safety belt use?**
 Yes No
14. **In the past month, have you gone through a traffic safety checkpoint where police were looking at child restraints and safety belt use?**
 Yes No
15. **Have you recently read, seen or heard anything about safety belts in Kentucky?**
 Yes
If yes, where did you see or hear about it? (Check all that apply):
 Newspaper Radio TV Poster Brochure Police checkpoint Other
If yes, what did it say? _____
 No
16. **Do you know the name of any safety belt enforcement program(s) in Kentucky? (check all that apply):**
 No Excuses, Buckle Up Buckle Up Kentucky. It's the law & it's enforced. Click It or Ticket
 Operation 35, Buckle Up Stay Alive

Table B-1. MOTORIST SURVEY DRIVER CHARACTERISTICS

		Percent	
		Baseline	Post
(Sample Size)		(851)	(693)
Gender	Male	41.2	48.0
	Female	58.8	52.0
Race	White	93.1	93.0
	Non-White	6.9	7.0
Age	<26	21.8	33.3
	26-49	56.0	46.0
	50+	22.2	20.7
Miles	<10,001	40.0	37.5
	10,001 - 15,000	28.0	29.9
	>15,000	32.0	32.6
Vehicle Type	Passenger Car	52.9	53.5
	Pick-up Truck	20.0	21.7
	SUV	16.1	14.1
	Van	9.6	8.6

APPENDIX C. TELEPHONE SURVEY RESULTS

TABLE C-1. RESULTS OF TELEPHONE SURVEY

Question	Choices	Percent		t-test Statistic*
		Before	After	
Gender	Male	45.3	49.1	
	Female	54.7	50.9	
Frequency of driving	Almost everyday	81.4	80.8	
	Few days a week	9.8	10.9	
	Few days a month	1.4	1.9	
	Few days a year	1.0	0.8	
	Never	6.4	5.7	
Type of vehicle driven most often	Car	60.3	57.0	
	Van or minivan	7.7	7.1	
	Motorcycle	0.0	0.6	
	Pickup truck	20.3	21.4	
	Sport Utility Vehicle	10.7	12.3	
	Other non-truck	0.2	0.6	
	Other truck	0.9	1.0	
Seat belt configuration	Across shoulder	6.4	6.5	
	Across lap	0.9	0.4	
	Across both	92.8	93.1	
Frequency wearing shoulder belt	All of the time	74.2	75.3	
	Most of the time	12.9	12.7	
	Some of the time	6.0	7.3	
	Rarely	3.7	1.8	
	Never	3.2	2.9	
Frequency wearing lap belt	All of the time	75.2	76.3	
	Most of the time	11.6	11.5	
	Some of the time	6.2	6.7	
	Rarely	3.4	2.0	
	Never	3.6	3.5	
Last time not wearing seat belt	Within the past day	20.9	16.3	
	Within the past week	9.9	10.0	
	Within the past month	5.1	6.1	
	Within the past year	5.3	3.0	
	A year or more ago	58.9	64.6	
Change of seat belt usage in the last 30 days	Increased	7.7	12.2	p < 0.05
	Decreased	0.9	0.8	
	Stayed the same	91.4	86.9	
Of those who said "increase", what caused your seat belt usage to increase?	Increased awareness	55.6	28.3	
	Influence/pressure	13.9	6.7	
	Seatbelt law	16.7	38.3	
	Was in a crash	2.8	8.3	
	Don't want to get another ticket	0.0	15.0	
Does Kentucky have a law requiring seat belt use for adults?	Yes	97.8	98.1	
	No	2.2	1.9	
Likelihood for receiving ticket while not wearing seat belt for six months	Very likely	19.6	29.2	p < 0.05
	Somewhat likely	27.7	28.3	
	Somewhat unlikely	19.1	18.4	
	Very unlikely	33.6	24.1	

TABLE C-1. RESULTS OF TELEPHONE SURVEY (continued)

Question	Choices	Percent		t-test Statistic*
		Before	After	
Understanding of existing seat belt offense level	Police can stop for just for seatbelt violation	45.3	60.0	p < 0.05
	Police must observe another violation	54.7	40.0	
Should police be able to ticket for not wearing seat belt when no other traffic laws are being broken (primary law)?	Yes	59.0	61.6	
	No	41.0	38.4	
Have you received a ticket for not wearing a seat belt?	Yes	4.0	6.7	
	No	96.0	93.3	
If yes, how long ago was it received?	Weeks ago	0.0	2.9	
	Months ago	25.0	20.0	
	Years ago	75.0	77.1	
Are seat belts just as likely to harm as they are to hurt?	Strongly agree	15.3	13.7	
	Somewhat agree	25.6	21.6	
	Somewhat disagree	19.2	18.5	
	Strongly disagree	39.9	46.1	
If in a crash, do you want to wear seat belt?	Strongly agree	84.6	83.7	
	Somewhat agree	10.2	10.7	
	Somewhat disagree	2.8	2.1	
	Strongly disagree	2.4	3.4	
Police generally do not write tickets for seat belt violations	Strongly agree	23.5	21.2	
	Somewhat agree	31.7	30.0	
	Somewhat disagree	24.7	23.0	
	Strongly disagree	20.0	25.9	
Police enforcement of belt laws are important	Strongly agree	62.7	67.2	
	Somewhat agree	20.7	19.3	
	Somewhat disagree	6.6	6.3	
	Strongly disagree	10.0	7.3	
Wearing belt makes me worry about getting into an accident	Strongly agree	8.1	7.1	
	Somewhat agree	7.5	8.3	
	Somewhat disagree	20.4	16.3	
	Strongly disagree	64.0	68.3	
Police are ticketing more often than a few months ago	Strongly agree	20.9	34.6	p < 0.05
	Somewhat agree	34.5	41.0	
	Somewhat disagree	25.8	14.4	
	Strongly disagree	18.8	10.0	
Aware of special efforts regarding seatbelt ticketing in the last 30 days	Yes	9.1	53.8	p < 0.05
	No	90.9	46.2	

TABLE C-1. RESULTS OF TELEPHONE SURVEY (continued)

Question	Choices	Percent		t-test Statistic*
		Before	After	
If yes, where did you see or hear of this?	TV	33.3	55.7	
	Radio	26.7	33.9	
	Friend-Relative	20.0	8.6	
	Newspaper	15.6	13.6	
	Witnessed checkpoint	8.9	6.8	
	Road signs	4.4	5.0	
If you said TV or radio, in what form did you see or hear of this?	News story	40.7	33.1	
	Commercial advertisement	51.9	58.6	
	Something else	7.4	2.4	
Have you heard about seat belt checkpoints in the last 30 days?	Yes	18.6	52.4	p < 0.05
	No	80.8	45.7	
If yes, where did you see or hear of this?	TV	17.2	39.6	
	Radio	16.1	22.5	
	Friend-Relative	21.5	18.5	
	Newspaper	12.9	16.7	
	Witnessed checkpoint	30.1	15.6	
If you said TV or radio, in what form did you see or hear of this?	News story	61.3	52.6	
	Commercial advertise	41.9	40.9	
	Something else	0.0	2.9	
In the last 30 days have you seen a checkpoint?	Yes	9.2	14.5	p < 0.05
	No	90.6	84.4	
If yes, were you stopped at the checkpoint?	Yes	54.3	55.3	
	No	45.7	44.7	
In the last 30 days have you been aware of increased child safety seat enforcement?	Yes	17.0	38.5	p < 0.05
	No	83.0	61.5	
In the last 30 days have you been aware of increased publicity related to seat belt usage?	Yes	79.2	90.0	p < 0.05
	No	20.8	10.0	
Number of messages in the last 30 days	More than usual	11.3	60.2	p < 0.05
	Fewer than usual	4.3	0.9	
	About the same	84.4	39.0	
Have you seen or heard about any activities related to seat belt usage in the last 30 days?	Yes	4.4	3.9	
	No	95.6	96.1	
Importance of seat belt enforcement for adults	Very important	54.3	62.9	
	Fairly important	18.2	14.5	
	Just somewhat important	17.8	12.2	
	Not that important	9.6	10.4	
Children under 12 in household	Yes	26.9	29.4	
	No	73.1	70.6	

TABLE C-1. RESULTS OF TELEPHONE SURVEY (continued)

Question	Choices	Percent		t-test Statistic*		
		Before	After			
Have you seen or heard about any advertisements that encourage adults to use car seats and seat belts on their children in the last 30 days?	Yes	45.6	60.8	p < 0.05		
	No	54.4	39.2			
If yes, then what did you see or hear?	TV/Radio Commercials	69.9	92.0			
	General Information	35.8	29.4			
	Proper Use	11.5	2.6			
	Newspaper/Magazines/Road signs	15.5	9.9			
	Injuries/Fatalities without safety seats	6.2	2.9			
	Safety Seat enforcement	4.4	9.6			
	Campaigns	0.4	1.3			
Have you heard or seen these slogans in the past 30 days?	Friends don't let friends drive drunk	80.6	81.5	p < 0.05**		
	Click it or ticket	40.5	67.0			
	Buckle up America	42.7	48.4			
	Children In Back	25.3	26.7	p < 0.05**		
	You drink, you drive, you lose	60.9	66.3			
	Buckle up Kentucky. It's the Law and it's Enforced	65.1	78.1			
	Buckle up for Those You Love	55.7	56.4	p < 0.05**		
	Get Stupid, Get Busted	19.4	23.6			
	None of these	6.8	2.1			
Is there any particular information that you would find helpful on how to protect a child in a motor vehicle?	Yes	25.0	22.2			
	No	75.0	77.8			
If yes, then what information would you find helpful?	Proper Use	53.2	56.1			
	General Information	24.2	23.7			
	Size Requirements	9.7	8.8			
Would you be interested in seeing programs on (on a scale from 1 to 5):	Increase seat belt use	1 (Don't want them at all)	5.9	6.8		
		2	5.1	5.4		
		3	18.8	15.7		
		4	17.8	14.3		
		5 (Want them very much)	52.5	57.8		
	Increase child safety seat use	1 (Don't want them at all)	3.6	3.9		
		2	2.2	1.9		
		3	11.2	11.6		
		4	16.5	13.3		
		5 (Want them very much)	66.5	69.2		
	Incentives to buckle up	1 (Don't want them at all)	29.1	23.3		p < 0.05
		2	8.3	6.6		
		3	20.0	20.6		
		4	9.5	12.0		
		5 (Want them very much)	33.0	37.5		

TABLE C-1. RESULTS OF TELEPHONE SURVEY (continued)

Question	Choices	Percent		t-test Statistic*
		Before	After	
School activities	1 (Don't want them at all)	1.6	2.7	
	2	2.2	2.3	
	3	7.8	6.4	
	4	11.4	11.0	
	5 (Want them very much)	76.9	77.6	
Proper child safety seat usage information	1 (Don't want them at all)	3.0	3.5	
	2	2.6	4.1	
	3	12.6	11.4	
	4	15.6	12.2	
	5 (Want them very much)	66.1	68.8	
Consider yourself Hispanic Latino	Yes	4.3	2.5	
	No	95.7	97.5	
Racial categories that describe you	American Indian or Alaskan Native	3.6	6.1	
	Asian	1.6	0.8	
	Black or African American	7.0	4.8	
	Native Hawaiian or o	0.4	0.2	
	White	87.6	91.0	
	Some other race	1.6	0.8	
Highest year of school completed	8th grade or lower	4.6	4.1	
	9th grade	1.6	1.6	
	10th grade	3.8	2.9	
	11th grade	3.4	3.1	
	12th grade-GED	34.9	34.5	
	Some college-post secondary education	23.5	28.7	
	College graduate or higher	28.1	25.2	
More than one telephone number in your household	Yes	17.2	15.9	
	No	82.8	84.1	
Respondent understanding	Excellent	75.8	75.8	
	Good	19.2	21.1	
	Fair	3.2	2.7	
	Poor	1.8	0.4	

*A t-test was conducted comparing the means of the before and after samples. Questions that had a p-value of less than or equal to 0.05 were considered as showing a "statistically significant" change. The test applied to all responses, even those not listed.

**Further analysis was not needed therefore, a t-test was not performed on these multiple response questions.